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TITLE: Family Maltreatment, Substance Problems, and Suicidality: Prevalence Surveillance and Ecological Risk/ Protective Factors Models

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## INTRODUCTION:

Of the many concerns about AF's force behavioral health protection, AF commanders identify secretive problems (family maltreatment, suicidality, and problematic alcohol/drug use) as 3 of the top 5 concerns. These problems are prevalent — the PRMRP-funded pilot study for the current proposal revealed that 25% of AF members reported at least one secretive problem at a serious level, yet only 1 out of 6 of these airmen report that anyone in the AF knows that they are having problems. Yet, the AF currently has no system to routinely track prevalences. Further, enormous gaps exist in our knowledge about risk and protective factors for these problems, especially in military communities. This study seeks to derive and validate an innovative public health surveillance system. Years of pilot work with the AF found that it is possible to derive accurate complex statistical estimation algorithms from data sets containing both nonsensitive information and assessments of secretive problems. These algorithms can then be applied to data sets that do not directly assess secretive problems to accurately estimate problem prevalences. In other words, a single survey administration and the algorithms can obviate the need for future secretive behavior surveys, making this a cost effective and sustainable planning tool. Further, the data set to be used for algorithm derivation will also be ideal to test a series of specific hypotheses about individual, family, workplace, and community risk and protective factors for each of the secretive problems.

## BODY:

We have encountered several programming challenges in utilizing the University's supercomputing facility to develop and run our algorithm analyses. We have worked with a parallel computing consultant and successfully overcome the primary challenges; we are in possession of code that successfully runs on the supercomputer. We are now working on identifying an additional consultant to solve a few final programming problems. We expect to catch up with analyses within the next several weeks.

**In Progress** Task 7 Derive, validate, and develop confidence intervals for the next eight algorithms:

- Female to Male Partner Physical Abuse (substantiatable)
- Female to Male Partner Physical Abuse (sub-threshold)
- Female to Male Partner Emotional Abuse
- Parent to Child Physical Abuse (substantiatable)
- Parent to Child Physical Abuse (sub-threshold)
- Parent to Child Emotional Abuse
- Parent to Child Neglect.

**In Progress** Task 8 Test all hypothesized risk/protective effects and develop and validate regression and structural equation modeling based models for next two dependent variables:

- Child Physical Abuse
- Child Emotional Abuse

**In Progress** Task 10 Write reports detailing algorithms developed and risk/protective factor analyses completed in Year 2 and brief to AF leadership.

**In Progress** Task 11 Derive, validate, and develop confidence intervals for the next seven algorithms:

- AD suicidality
- AD drug use (prescription drug misuse)
- AD drug use (illicit drugs)
- AD problem drinking
- AD problem drinking (sub-threshold)

- Male to Female Any Partner Abuse
- Female to Male Any Partner Abuse

In Progress Task 12 Test all hypothesized risk/protective effects and develop and validate regression and structural equation modeling based models for next four dependent variables:

- Suicidal Behaviors (In Progress)
- Alcohol Dependence (Completed)
- Comorbid Partner Physical and Child Physical Abuse (No progress to date)

Completed Task 13 Present project goals, progress, and challenges at meetings with Military Advisory Panel in June and December, 2009.

Task 14 Write reports detailing algorithms developed and risk/protective factor analyses completed in Year 3 and brief to AF leadership.

Task 15 Derive, validate, and develop confidence intervals for the final three algorithms:

- Parent to Child Any Maltreatment
- Any Substantiatable Family Maltreatment
- Any Secretive Problem (1-17)

KEY RESEARCH ACCOMPLISHMENTS: Bulleted list of key research accomplishments emanating from this research.

- Analyses of unique risk factors for the following targets are complete and results are written: male to female partner physical abuse, female to male partner physical abuse, male to female emotional abuse, female to male emotional abuse, alcohol abuse, suicidal ideation, suicidal behavior, parent-child aggression, child physical abuse, child emotional abuse. Regression models for all of the above listed targets have been cross-validated as well. Manuscripts have been prepared and submitted (see below).
- Buffering protective effects and additive risk effects have been identified and cross-validated for male to female partner physical abuse, female to male partner physical abuse, male to female emotional abuse, female to male emotional abuse, alcohol abuse, suicidal ideation, parent-child aggression, child physical abuse. Results have begun to be written up and submitted for publication (see below).
- Models using structural equation modeling have been developed, tested, and cross-validated for male to female partner physical abuse, female to male partner physical abuse, alcohol abuse, and emotional abuse. Results have been written up for male to female partner physical abuse, female to male partner physical abuse, alcohol abuse. Manuscripts have been submitted for alcohol abuse.

REPORTABLE OUTCOMES: Provide a list of reportable outcomes that have resulted from this research to include:

Conference Presentations:

Foran, H. M, Slep, A. M. S., Heyman, R. E., & Snarr, J. (2008, July). Unique Risk and

Protective Factors of Partner Aggression and Abuse in a Large Survey sample. International Family Violence and Child Victimization Research Conference. Portsmouth, New Hampshire. Presented by A. Slep.

Snarr, J., Slep, A.M.S, Heyman, R. E., Foran, H. M. (2008, July) Risk and Protective Factors of Child Abuse in A Large Survey Sample. International Family Violence and Child Victimization Research Conference. Portsmouth, New Hampshire. Presented by A. Slep.

Foran, H., Slep, A.M.S, Heyman, R.E., Snarr, J. (2008, November). Unique Risk and Protective Factors of partner Aggression and Abuse in a Large Survey sample. Presented at the Annual Association for Advancement of Behavior and Cognitive Therapy Convention, Orlando, FL.

Heyman, R. E., & Slep, A.M.S, (2008, July). Gender Differences in Reporting Partner Aggression and Diagnosable –Abuse”. International Family Violence and Child Victimization Research Conference. Portsmouth, New Hampshire.

Heyman, R. E., & Slep, A.M.S, (2008, July). Gender Differences in Reporting Partner Aggression and Diagnosable –Abuse”. . Presented at the Annual Association for Advancement of Behavior and Cognitive Therapy Convention, Orlando, FL.

Langhinrichsen-Rohling, J., Snarr, J. D., Slep, A. E. S., & Heyman, R. E. (2009, April). *Using a large-scale survey to determine individual, family, work, and community correlates of suicide ideation for U.S. Air Force members*. Paper presented at the 42nd Annual Meeting of the American Association of Suicidology, San Francisco, CA.

#### Manuscripts:

Slep, A. M. S., Foran, H., Heyman, R. E, & Snarr, J. D. (in press). Risk and protective factors for clinically significant intimate partner violence in a population survey of the US Air Force.

Slep, A. M. S., Foran, H., Heyman, R. E, & Snarr, J. D. (submitted for publication). Risk and protective factors for partner aggression in a large scale survey of the US Air Force.

Snarr, J. D., Slep, A. M. S., & Heyman, R. E. (manuscript under revision). Recent suicidal ideation and suicide attempts in a large–scale survey of the U.S. Air Force: Prevalences and demographic risk factors.

Foran, H., Slep, A. M. S., & Heyman, R. E. (submitted for publication). Hazardous Alcohol Use among Active Duty Air Force Personnel: Identifying Unique Risk and Promotive Factors.

Foran, H., Slep, A. M. S., & Heyman, R. E. (submitted for publication). Prevalences of Partner Aggression and Abuse in a Representative Military Sample.

Foran, H., Slep, A. M. S., & Heyman, R. E. (submitted for publication). A Model of Hazardous Drinking and Military Community Functioning – Identifying Mediating Risk Factors.

Langhinrichsen-Rohling, J., Snarr, J. D., Slep, A. M. S., Heyman, R. E. & Foran, H. M. (submitted for publication). Risk and promotive factors for suicidal ideation in a large-scale survey of the U. S. Air

Force.

Foran, H. M., Slep, A. M. S., & Heyman, R. E. (under review with Public Affairs). Emotional abuse victimization among active duty Air Force personnel: Identifying Risk and Protective Factors.

Foran, H., Slep, A. M. S., Heyman, R. E., & Snarr, J. D. (manuscript in preparation). Intimate Partner Violence and Problem Drinking in the Military: Understanding Protective Factors.

Slep, A. M. S., Snarr, J. D., Heyman, R. E., & Foran, H. M. (manuscript in preparation). Risk and promotive factors for parent-child physical aggression in a population survey of the U.S. Air Force.

Slep, A. M. S., Snarr, J. D., Heyman, R. E., & Foran, H. M. (manuscript in preparation). Physical child abuse in a large-scale survey of the U.S. Air Force: Risk and promotive factors.

Slep, A. M. S., Snarr, J. D., Heyman, R. E., & Foran, H. M. (manuscript in preparation). Risk and promotive factors for emotional child abuse among active duty U.S. Air Force parents.

**CONCLUSION:** The purpose of this project is to develop and validate the accuracy of an innovative surveillance system (AF-wide) for family maltreatment, suicidality, and problematic alcohol/drug use. A second purpose is to test a series of hypotheses regarding risk and protective factors for secretive problems in AF communities.

A detailed description of current conclusions is not available until reports have been reviewed by Public Affairs. Tabular presentation of results that have been reviewed by Public Affairs and are available for dissemination are presented in Appendix I. To summarize, hypothesized risk factors across individual, family, workplace, and community were significantly related to various behavioral health problems. Individual and family variables were the strongest predictors. Community and work factors predicted family and individual factors, which then in turn, predicted behavioral health problems. These results imply somewhat different risk profiles for men and women. The current work adds to the literature on understanding clinically significant levels of partner violence, emotional abuse, child abuse, suicidality, and alcohol abuse among military families by examining a large number of risk and protective factors across ecological levels that had not yet been evaluated.

**REFERENCES:** List all references pertinent to the report using a standard journal format (i.e. format used in *Science*, *Military Medicine*, etc.).

Not applicable at this time, although several of the above listed –REPORTABLE OUTCOMES” are complete manuscripts that are under review for publication or soon to be submitted for publication review.

**APPENDICES:**

Appendix I: Tables 1-13

SUPPORTING DATA: NA

Appendix I:

Table 1

Bivariate correlations among predictor variables and partner aggression

	<u>Men</u>		<u>Women</u>	
	<i>r</i>	M (SD)	<i>r</i>	M (SD)
<u>Individual Level</u>				
Alcohol Problems	.18**	3.61(3.80)	.09**	2.50(2.73)
Years in Military	-.17**	10.93(7.17)	-.16**	7.46(6.04)
Financial Stress	.15**	1.84(0.88)	.15**	1.74(0.85)
Depressive Symptoms	.16**	1.50(0.60)	.10**	1.62(0.64)
Personal Coping	-.16**	4.18(0.48)	-.11**	4.04(0.51)
Physical Well-being	-.11**	4.13(0.71)	-.05	4.02(0.73)
Spirituality/Religiosity	-.10**	3.07(1.14)	-.00	3.14(1.06)
<u>Family Level</u>				
Relationship Satisfaction	-.21**	5.83(1.09)	-.18**	5.89(1.13)
Family Coping	-.17**	5.00(0.97)	-.18**	5.22(0.87)
Spouse Support for Deploy.	-.17**	3.13(0.80)	-.16**	3.14(0.90)
Support from Sign. Other	-.15**	4.90(1.03)	-.15**	5.23(0.93)
Parental Status	-.17**	62.1% <sup>a</sup>	-.07**	50.5% <sup>a</sup>
Marital Length	-.10**	8.42(6.82)	-.17**	5.54(5.66)
Family Income (US \$ monthly)	-.14**	6229.26(3300.52)	-.05	7337.59(4639.88)
Parent Child Relations	-.12**	5.08(0.72)	-.08	5.23(0.71)
Child Physical Aggression	.17**	1.08(1.21)	.05	1.20(1.35)
<u>Organization Level</u>				
Satisfaction with Air Force	-.13**	4.17(1.08)	-.10**	4.27(1.15)
Workgroup Cohesion	-.10**	4.13(1.10)	-.01	3.93(1.14)
Work Relations	-.10**	3.94(0.85)	-.08*	3.76(0.92)
Weeks Deployed	-.00	8.18(11.13)	-.04	5.20(9.31)
Hours Worked	.05*	41.02(4.38)	.02	40.59(3.16)
<u>Community Level</u>				
Community Unity	-.11**	4.09(0.83)	-.02	4.14(0.83)
Support from Neighbors	-.12**	4.55(1.02)	-.06	4.40(1.06)
Support for Youth	-.08**	4.31(0.97)	-.02	4.38(0.95)



Support from Formal agencies	-.05*	4.38(0.93)	.01	4.54(0.91)
Social Support	-.07**	4.25(1.38)	-.03	4.22(1.48)
Support from Leadership	-.08**	4.11(0.88)	-.02	4.09(0.88)
Community Safety	-.08**	5.02(0.76)	-.06**	4.97(0.80)
Community Stress	.09**	4.11 (0.91)	.06	4.13(0.91)

$r$  = Correlation Coefficient. M (SD) = Means (Standard deviations). \*\*  $p < .001$ , \*  $p < .01$ . <sup>a</sup> Represents the percentage of men and women with minor children living with them in the sample.

Table 2  
Stepwise regression analyses of men's partner aggression

	Development Sample ( $n = 5,397$ )			Validation Sample ( $n = 5,640$ )		
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>t</i>
<u>Overall in a Relationship</u>						
Relationship Satisfaction	-0.27	0.03	-9.38***	-0.27	-0.02	-11.01***
Alcohol Problems	0.16	0.03	5.86***	0.11	0.02	4.83***
Financial Stress	0.13	0.02	5.39***	0.11	0.03	3.53***
Parental Status	-0.41	0.06	-7.20***	-0.30	0.05	-5.61***
Military Years	-0.12	0.03	-4.18***	-0.16	0.02	-6.40***
Community Unity	-0.09	0.03	-3.04**	-0.04	0.03	-1.53
Support from Neighbors	-0.06	0.03	-2.33*	-0.05	0.02	-2.22*
Personal Coping	-0.08	0.03	-2.66**	-0.09	0.02	-3.86***
Support from Formal Agencies	-0.08	0.03	2.95**	-0.06	0.03	-2.13*
<u>Individual Level</u>						
Depressive Symptoms	0.09	0.04	2.49*	0.11	0.03	4.34***
Alcohol Problems	0.19	0.03	6.86***	0.14	0.02	6.47***
Years in Military	-0.16	0.03	-6.05***	-0.18	0.02	-7.48***
Financial Stress	0.13	0.02	5.41***	0.11	0.03	3.46***
Personal Coping	-0.13	0.03	-4.15***	-0.13	0.02	-5.28***
Spirituality/Religiosity	-0.07	0.03	-2.65*	-0.00	0.03	-0.10
<u>Family Level</u>						
Parental Status	-0.51	0.05	-9.66***	-0.38	0.05	-7.71***
Family Income	-0.17	0.03	-5.98***	-0.19	0.03	-7.32***
Relationship Satisfaction	-0.32	0.03	-12.20***	-0.31	0.03	-11.48***
Support from Sign. Other	-0.08	0.02	-3.48***	-0.04	0.03	-1.68
<u>Organization Level</u>						
Satisfaction with Air Force	-0.17	0.03	-5.79***	-0.13	0.02	-5.26***
Work Relations	-0.08	0.03	-2.82**	-0.08	0.03	-2.69**
Work Group Cohesion	-0.07	0.03	-2.35*	-0.03	0.03	-0.81
Hours Worked	0.07	0.02	2.78**	-0.00	0.02	-0.03
<u>Community Level</u>						
Community Safety	-0.06	0.03	-2.11*	-0.06	0.02	-2.50*

Community Unity	-0.14	0.03	-4.52***	-0.07	0.03	-2.33*
Support from Formal Agencies	-0.06	0.03	-2.19*	-0.02	0.03	-0.64
Support from Neighbors	-0.13	0.03	-4.96***	-0.12	0.03	-4.57***

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\*\*\*  $p < .001$ , \*\* $p < .01$ , \*  $p < .05$ .

Table 3  
Stepwise regression analyses of women's partner aggression

	<u>Development Sample (<i>n</i> = 1,866)</u>			<u>Validation Sample (<i>n</i> = 1,902)</u>		
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>t</i>
<u>Overall in a Relationship</u>						
Relationship Satisfaction	-0.22	0.05	-4.65***	-0.24	0.05	-4.97***
Alcohol Problems	0.10	0.05	2.16*	0.17	0.05	3.86***
Financial Stress	0.13	0.04	2.93**	0.25	0.04	5.85***
Military Years	-0.28	0.05	-5.44***	-0.18	0.06	-3.25**
Support from Sign. Other	-0.12	0.05	-2.35*	-0.09	0.05	-1.71
<u>Individual Level</u>						
Alcohol Problems	0.12	0.05	2.53*	0.18	0.05	3.89***
Military Years	-0.25	0.05	-4.90***	-0.14	0.05	-2.53*
Financial Stress	0.18	0.04	4.25***	0.26	0.04	5.93***
Personal Coping	-0.11	0.04	-2.75**	-0.20	0.04	-5.01***
<u>Family Level</u>						
Parental Status	-0.29	0.09	-3.21**	-0.23	0.09	-2.50*
Relationship Satisfaction	-0.24	0.05	-5.34***	-0.28	0.05	-6.08***
Support from Sign. Other	-0.17	0.05	-3.45***	-0.13	0.05	-2.43*
<u>Organization Level</u>						
Satisfaction with Air Force	-0.16	0.04	-3.69***	-0.16	0.04	-3.78***
Work Relations	-0.14	0.05	-2.88**	-0.10	0.05	-2.27**
Workgroup Cohesion	-0.11	0.06	-2.02*	-0.03	0.05	-0.73
<u>Community Level</u>						
Community Safety	-0.10	0.04	-2.60*	-0.03	0.05	-0.57

\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

Table 4

*Bivariate Odds Ratios among Predictor Variables and Partner Physical Abuse*

	Men			Women		
<i>Individual Level</i>	b	OR	<i>M (SD)</i>	b	OR	<i>M (SD)</i>
Alcohol Problems	0.55	1.73***	3.61(3.80)	0.23	1.26	2.50(2.73)
Years in Military	-0.44	0.64***	10.93(7.17)	-0.47	0.63*	7.46(6.04)
Financial Stress	0.42	1.53***	1.84(0.88)	0.41	1.50**	1.74(0.85)
Depressive Symptoms	0.47	1.60***	1.50(0.60)	0.19	1.21	1.62(0.64)
Personal Coping	-0.52	0.60***	4.18(0.48)	-0.41	0.66**	4.04(0.51)
Physical Well-being	-0.25	0.78**	4.13(0.71)	-0.16	0.85	4.02(0.73)
Spirituality/Religiosity	-0.26	0.77*	3.07(1.14)	-0.01	0.99	3.14(1.06)
<i>Family Level</i>						
Relationship Satisfaction	-0.61	0.54***	5.83(1.09)	-0.55	0.58***	5.89(1.13)
Parental Status	-0.93	0.39***	57.1% <sup>a</sup>	-0.16	0.85	47.9% <sup>a</sup>
Support from Significant Other	-0.31	0.74***	4.90(1.03)	-0.54	0.58**	5.23(0.93)
Family Income (US \$ monthly)	-0.48	0.62***	6229(3301)	-0.34	0.71*	7338(4640)
Marital Length	-0.48	0.62***	8.42(6.82)	-0.87	0.42*	5.54(5.66)
Spouse Support for Deploy.	-0.55	0.58***	3.13(0.80)	-0.19	0.83	3.14(0.90)
Family Coping	-0.48	0.62***	5.00(0.97)	-0.50	0.61**	5.22(0.87)
Parent Child Relations	-0.34	0.71*	5.08(0.72)	-0.31	0.74	5.23(0.71)
Child Physical Aggression	0.73	2.08***	1.08(1.21)	0.22	1.25	1.20(1.35)
<i>Organization Level</i>						
Satisfaction with Air Force	-0.33	0.72***	4.17(1.08)	-0.20	0.82	4.27(1.15)
Workgroup Cohesion	-0.33	0.72***	4.13(1.10)	0.03	1.03	3.93(1.14)
Work Relations	-0.26	0.77**	3.94(0.85)	0.06	1.06	3.76(0.92)
Weeks Deployed	0.01	1.01	8.18(11.13)	-0.49	0.61	5.20(9.31)
Hours Worked	0.06	1.06	41.02(4.38)	-0.39	0.67	40.59(3.16)
Support from Leadership	-0.23	0.79**	4.11(0.88)	0.03	1.03	4.09(0.88)
<i>Community Level</i>						
Community Unity	-0.27	0.76**	4.09(0.83)	0.09	1.09	4.14(0.83)
Support from Neighbors	-0.35	0.71***	4.55(1.02)	-0.19	0.83	4.40(1.06)
Support for Youth	-0.17	0.84	4.31(0.97)	-0.25	0.78	4.38(0.95)
Support from Formal agencies	-0.19	0.82*	4.38(0.93)	0.08	1.08	4.54(0.91)
Social Support	-0.40	0.67***	4.25(1.38)	-0.19	0.83	4.22(1.48)
Community Safety	-0.10	0.91	5.02(0.76)	-0.27	0.77	4.97(0.80)
Community Stress	0.18	1.20*	4.11 (0.91)	0.00	1.00	4.13(0.91)

<sup>a</sup> Represents the percentage of men and women with minor children living with them in the sample.\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

Table 5  
*Stepwise Regression Analyses of Men's Partner Abuse*

	Development Sample			Validation Sample		
	<i>b</i>	<i>SE</i>	<i>Wald's statistic</i>	<i>b</i>	<i>SE</i>	<i>Wald's statistic</i>
<i>Within Ecological Levels</i>						
<i>Individual Level</i>						
Depressive Symptoms	0.22	0.11	4.17*	0.23	0.09	6.20*
Alcohol Problems	0.46	0.08	34.90***	0.29	0.07	16.40***
Financial Stress	0.27	0.09	9.68**	0.26	0.08	10.59**
Personal Coping	-0.26	0.10	6.60*	-0.20	0.12	2.72
<i>Family Level</i>						
Parental Status	-0.89	0.21	17.20***	-0.55	0.22	6.43*
Family Income	-0.38	0.12	10.86***	-0.55	0.13	19.28***
Relationship Satisfaction	-0.69	0.09	53.25***	-0.51	0.08	44.48***
<i>Organization Level</i>						
Satisfaction with Air Force	-0.29	0.07	17.42***	-0.42	0.09	22.68***
Work Group Cohesion	-0.26	0.08	10.66**	0.04	0.10	0.12
<i>Community Level</i>						
Social Support	-0.36	0.09	15.02***	-0.07	0.09	0.71
Community Unity	-0.21	0.10	4.31*	-0.26	0.09	7.82**
<i>Overall (Across Ecological Levels)</i>						
Relationship Satisfaction	-0.54	0.10	27.44***	-0.44	0.08	2.03***
Alcohol problems	0.40	0.09	22.09***	0.25	0.08	9.50**
Financial Stress	0.34	0.09	14.39***	0.34	0.08	16.00***
Social Support	-0.33	0.11	9.30**	-0.02	0.09	0.06
Parental Status	-0.90	0.22	16.27***	-0.77	0.22	12.67***

\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

Table 6  
*Stepwise Regression Analyses of Women's Partner Physical Abuse*

	Development Sample			Validation Sample		
	<i>b</i>	<i>SE</i>	<i>Wald's statistic</i>	<i>b</i>	<i>SE</i>	<i>Wald's statistic</i>
<i>Within Ecological Levels</i>						
<i>Individual Level</i>						
Financial Stress	0.34	0.15	5.40*	0.35	0.13	7.93**
Personal Coping	-0.35	0.15	5.39*	-0.26	0.12	4.88*
<i>Family Level</i>						
Family Income	-0.36	0.14	6.49*	-0.44	0.15	8.43**
Relationship Satisfaction	-0.56	0.12	1.61***	-0.39	0.15	6.62*
<i>Organization Level</i>						
None are significant						
<i>Community Level</i>						
None are significant						
<i>Overall (Across Ecological Levels)</i>						
Relationship Satisfaction	-0.62	0.15	4.18***	-0.38	0.15	2.57*
Family Income	-0.45	0.17	-2.67**	-0.44	0.15	-2.92**

\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

Table 7

*Bivariate Odds Ratios among Predictor Variables and Alcohol Abuse*

		Men			Women	
	Coefficient	ORs	CI	Coefficient	ORs	CI
<u>Individual Level</u>						
Years in military	-0.63	0.53***	0.50-0.56	-0.56	0.57***	0.47-0.69
Financial Stress	0.30	1.35***	1.30-1.40	0.41	1.51***	1.34-1.70
Depressive Symptoms	0.47	1.59***	1.53-1.66	0.50	1.65***	1.46-1.86
Personal Coping	-0.36	0.70***	0.63-0.70	-0.42	0.66***	0.59-0.74
Physical Well-being	-0.28	0.76***	0.71-0.80	-0.25	0.78***	0.70-0.87
Religious involvement	-0.40	0.67***	0.65-0.79	-0.36	0.70***	0.61-0.80
<u>Family Level</u>						
Support from Sign. other	-0.24	0.79***	0.75-0.83	-0.29	0.75***	0.66-0.85
Relationship Satisfaction	-0.25	0.78***	0.74-0.82	-0.23	0.79**	0.67-0.94
Number of Children	-0.58	0.56***	0.53-0.60	-0.83	0.44***	0.32-0.59
Family Income (US \$ monthly)	-0.81	0.45***	0.42-0.48	-0.62	0.54***	0.46-0.63
Marital Length	-0.42	0.66***	0.61-0.71	-0.23	0.80	0.56-1.14
Family Coping	-0.24	0.79***	0.74-0.84	-0.37	0.69***	0.57-0.84
Spouse Deployment						
Support	-0.20	0.82***	0.77-0.88	0.33	1.03	0.83-1.29
Parent Child Relations	-0.26	0.77***	0.71-0.84	-0.34	0.71*	0.54-0.94
Child Physical						
Aggression	0.25	1.29***	1.18-1.39	0.07	1.08	0.82-1.42
Partner Aggression	0.21	1.24***	1.18-1.30	0.19	1.21***	1.11-1.32
<u>Organization Level</u>						
Support from Leadership	-0.22	0.80***	0.77-0.84	-0.25	0.77***	0.69-0.88
Satisfaction with AF	-0.32	0.73***	0.69-0.76	-0.35	0.71***	0.62-0.80
Workgroup Cohesion	-0.32	0.73***	0.69-0.76	-0.26	0.77***	0.67-0.89
Work Relations	-0.20	0.82***	0.79-0.85	-0.17	0.85*	0.74-0.97
Weeks deployed	0.45	1.05*	1.00-1.09	0.02	1.02	0.90-1.16
Hours Worked	0.04	1.04*	1.00-1.09	0.14	1.14*	1.03-1.27
<u>Community Level</u>						
Community Unity	-0.23	0.80***	0.76-0.84	-0.27	0.76***	0.68-0.86
Support from Neighbors	-0.21	0.81***	0.77-0.84	-0.66	0.94	0.83-1.05
Support for Youth	-0.20	0.82***	0.78-0.86	-0.17	0.84*	0.74-0.96
Support from Formal	-0.22	0.81***	0.77-0.84	-0.25	0.78***	0.70-0.88



agencies

Social Support	-0.09	0.91***	0.87-0.96	-0.02	0.98	0.87-1.09
Community Safety	-0.16	0.85***	0.81-0.89	-0.21	0.81***	0.73-0.90
Community Stress	0.22	1.24***	1.19-1.30	0.20	1.22**	1.09-1.37

ORs = Odds Ratios. CI= 95th percentile Confidence Interval. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

Table 8

*Stepwise Regression Analyses of Men's Alcohol Abuse*

	<u>Development Sample</u>			<u>Cross-Validation</u>	<u>Generalizability Rubin's <i>F</i></u>		
	<i>b</i>	<i>SE</i>	<i>Wald's statistic</i>	Rubin's <i>F</i>	Marital Status	Region	City Size <sup>a</sup>
<u>Overall</u>							
Personal Coping	-0.07	0.03	5.76*	0.89	2.27*	1.11	1.18
Depressive Symptoms	0.28	0.03	152.41***				
Religious Involvement	-0.26	0.03	127.08***				
Years in Military	-0.22	0.04	32.14***				
Financial Stress	0.16	0.02	52.27***				
Number of Children	-0.31	0.04	73.64***				
Family Income	-0.33	0.05	52.55***				
Satisfaction with AF	-0.08	0.02	9.97**				
Work Group Cohesion	-0.06	0.03	5.02*				
<u>Overall in Relationships<sup>b</sup></u>							
Depressive Symptoms	0.27	0.03	85.31***	0.75	0.93	0.94	1.04
Religious Involvement	-0.27	0.03	103.29***				
Years in Military	-0.26	0.05	31.66***				
Financial Stress	0.12	0.04	11.71**				
Number of Children	-0.28	0.04	53.07***				
Family Income	-0.27	0.06	22.65***				
Satisfaction with AF	-0.07	0.03	5.45*				
Work Group Cohesion	-0.11	0.03	11.13**				
Relationship Satisf.	-0.14	0.03	21.79***				
Partner Aggression	0.09	0.03	14.59***				
<u>Overall in Relationships with Children<sup>b</sup></u>							
Depressive Symptoms	0.29	0.04	49.31***	0.27	0.87	1.23	0.58
Religious Involvement	-0.28	0.05	36.33***				
Years in Military	-0.28	0.05	27.56***				
Financial Stress	0.14	0.04	9.64**				
Child Phy. Aggression	0.15	0.04	11.65**				
Partner Aggression	0.08	0.04	4.07*				
Work Group Cohesion	-0.12	0.05	5.24*				

Relationship Satisf. -0.14 0.04 14.22\*\*\*

Individual Level

Personal Coping	-0.12	0.03	19.35***	1.18	3.14*	1.65	1.25
Depressive Symptoms	0.32	0.02	207.79***				
Religious Involvement	-0.31	0.02	204.40***				
Years in Military	-0.54	0.03	386.00***				
Financial Stress	0.15	0.02	51.76***				

Family Level

Family Income	-0.64	0.03	412.05***	1.37	8.57***	1.58	0.43
Number of Children	-0.37	0.03	124.31***				

Family Level – In Relationships<sup>b</sup>

Family Income	-0.56	0.04	209.22***	0.90	2.64*	0.80	0.65
Number of Children	-0.36	0.03	115.97***				
Relationship Satisf.	-0.20	0.03	51.35***				
Partner Aggression	0.12	0.02	25.20***				
Sup. from Sign. Other	-0.12	0.03	18.39***				

Family Level – In Relationships with Children<sup>b</sup>

Family Income	-0.35	0.06	39.30***	0.51	1.51	1.36	0.43
Number of Children	-0.17	0.06	8.38**				
Relationship Satisf.	-0.18	0.04	19.76***				
Partner Aggression	0.10	0.04	19.04***				
Sup. from Sign. Other	-0.12	0.04	7.52**				
Parent-child Relations	-0.15	0.05	9.21**				
Child Phy. Aggression	0.19	0.05	9.21**				

Family Level – Married<sup>b</sup>

Family Income	-0.27	0.05	32.45***	0.94	---	0.91	0.52
Number of Children	-0.21	0.04	30.47***				
Relationship Satisf.	-0.15	0.04	15.25***				
Partner Aggression	0.13	0.03	22.77***				
Sup. from Sign. Other	-0.12	0.04	10.82**				
Marital Length	-0.20	0.05	17.11***				
Family Coping	-0.11	0.04	6.03*				

Family Level – Married with Children<sup>b</sup>

Family Income	-0.22	0.06	12.40***	0.34	---	1.15	0.71
Number of Children	-0.13	0.06	4.56*				
Relationship Satisf.	-0.18	0.04	17.07***				
Partner Aggression	0.12	0.04	9.01**				
Sup. from Sign. Other	-0.12	0.05	6.79**				
Marital Length	-0.17	0.05	7.11**				
Parent-child Relations	-0.15	0.05	7.51**				
Child Phy. Aggression	0.17	0.05	13.05***				

Organization Level

Satisfaction with AF	-0.23	0.02	100.12***	1.26	9.20***	0.86	1.19
Work Group Cohesion	-0.23	0.03	83.14***				

Community Level

Community Stress	0.09	0.03	10.29**	1.28	2.24	1.25	0.88
Support from Neighbors	-0.13	0.02	30.63***				
Sup. from Formal Ag.	-0.12	0.03	17.09***				
Community Safety	-0.06	0.03	5.08*				

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\*\*\*  $p < .001$ , \*\* $p < .01$ , \* $p < .05$ .

Table 9

*Stepwise Regression Analyses of Women's Alcohol Abuse*

	<u>Development Sample</u>			<u>Cross-Validation</u>	<u>Generalizability Rubin's F</u>		
	<i>b</i>	<i>SE</i>	<i>Wald's statistic</i>	Rubin's <i>F</i>	Marital Status	Region	City Size <sup>a</sup>
<u>Overall</u>							
Depressive Symptoms	0.33	0.07	20.30***	1.43	2.48*	0.97	0.76
Religious Involvement	-0.23	0.08	9.39**				
Financial Stress	0.28	0.08	12.12***				
Number of Children	-0.71	0.17	17.55***				
Family Income	-0.37	0.09	18.39***				
Community Unity	-0.13	0.06	4.09*				
<u>Overall in Relationships<sup>b</sup></u>							
Depressive Symptoms	0.41	0.10	17.82***	1.38	0.41	0.53	0.67
Religious Involvement	-0.26	0.09	7.98**				
Partner Aggression	0.12	0.05	6.16*				
Number of Children	-0.47	0.18	7.03**				
Family Income	-0.39	0.09	16.79***				
Community Unity	-0.22	0.09	6.06*				
<u>Individual Level</u>							
Personal Coping	-0.15	0.06	5.32**	0.89	1.86	0.22	0.39
Depressive Symptoms	0.30	0.08	15.34***				
Religious Involvement	-0.27	0.08	12.88***				
Years in Military	-0.41	0.10	16.84***				
Financial Stress	0.26	0.07	13.78***				
<u>Family Level</u>							
Number of Children	-0.60	0.16	14.20***	0.34	6.15**	1.34	0.63
Family Income	-0.49	0.08	37.34***				
<u>Family Level – In Relationships<sup>b</sup></u>							
Number of Children	-0.50	0.17	8.18**	0.00	0.75	0.68	0.43

Family Income	-0.41	0.09	19.30***
Partner Aggression	0.14	0.05	8.47**
Sup. from Sign. Other	-0.25	0.07	13.60***

Family Level – in Relationships with Children<sup>b</sup>

Number of Children	-0.81	0.29	7.71**	1.81	0.22	0.95	0.98
Parent-child Relations	-0.38	0.14	7.49**				

Organization Level

Hours worked	0.13	0.05	5.33*	1.25	1.05	0.43	0.43
Satisfaction with AF	-0.34	0.06	29.80***				

Community Level

Community Unity	-0.22	0.06	13.56***	2.80	0.24	0.42	0.29
Community Safety	-0.17	0.06	9.53**				

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\*\*\*  $p < .001$ , \*\* $p < .01$ , \*  $p < .05$  Development Sample:  $n = 5,469$ . Validation Sample:  $n = 5,470$ . <sup>a</sup> City size  $n = 9,131$ . <sup>b</sup> Subsample analysis of dating, married, and/or parents  $ns = 2,434 - 4,012$ . Sup. from Sign. Other = Career Support from Significant Other.

Table 10

*Weighted<sup>a</sup> 12-month prevalence and adjusted odds using multiple logistic regression of suicidality among Air Force Active Duty subgroups.*

Variable	Men						Women					
	Suicidal ideation			Suicide attempt <sup>b</sup>			Suicidal ideation			Suicide attempt <sup>b</sup>		
	%	OR	CI	%	OR	CI	%	OR	CI	%	OR	CI
Sex												
Male (OR vs. female)	<b>3.3</b>	<b>0.8</b>	<b>0.8-0.9</b>	9.4	1.2	1.0-1.5						
Female (OR vs. male)							<b>5.5</b>	<b>1.2</b>	<b>1.2-1.3</b>	6.9	0.8	0.7-1.0
Race/ethnicity												
White <sup>c</sup>	3.4	1.1	0.9-1.2	9.9	1.4	1.0-2.1	5.6	1.1	0.8-1.4	6.0	0.8	0.4-1.5
Black	<b>2.8</b>	<b>0.8</b>	<b>0.7-1.0</b>	7.9	1.0	0.5-2.0	4.8	0.9	0.7-1.2	3.7	0.5	0.2-1.2
Hispanic/Latino	<b>2.8</b>	<b>0.8</b>	<b>0.6-0.9</b>	8.5	0.8	0.4-1.7	6.1	1.1	0.8-1.6	<b>16.4</b>	<b>2.0</b>	<b>1.0-4.0</b>
Other <sup>d</sup>	4.1	1.0	0.8-1.3	6.0	0.6	0.2-1.4	7.3	1.2	0.8-2.0	8.6	1.2	0.5-3.1
Unknown	<b>4.8</b>	<b>1.5</b>	<b>1.2-1.9</b>	9.0	1.4	0.6-3.1	3.8	0.7	0.4-1.3	—	—	—
Marital status												
Married	<b>2.5</b>	<b>0.8</b>	<b>0.7-0.8</b>	7.0	0.9	0.7-1.1	4.8	0.9	0.8-1.0	5.4	0.8	0.5-1.1
Unmarried	<b>4.8</b>	<b>1.3</b>	<b>1.2-1.4</b>	11.6	1.1	0.9-1.4	6.1	1.1	1.0-1.2	9.0	1.3	0.9-2.0
Religious faith												
Roman Catholic	3.1	0.9	0.8-1.0	9.6	1.1	0.7-1.6	<b>4.7</b>	<b>0.7</b>	<b>0.6-0.9</b>	6.6	0.8	0.3-1.7
Evangelical	<b>2.9</b>	<b>0.8</b>	<b>0.7-0.9</b>	10.2	1.1	0.7-1.7	<b>4.4</b>	<b>0.8</b>	<b>0.6-1.0</b>	5.3	0.9	0.4-2.2
Other Protestant	<b>3.0</b>	<b>0.8</b>	<b>0.8-0.9</b>	7.7	0.8	0.6-1.2	5.7	0.9	0.8-1.1	8.0	1.2	0.6-2.1
Non-Christian	<b>6.4</b>	<b>1.5</b>	<b>1.3-1.9</b>	11.2	1.1	0.6-1.9	<b>11.2</b>	<b>1.8</b>	<b>1.3-2.6</b>	13.9	2.3	0.9-6.2
Unknown	4.3	1.1	0.9-1.2	10.7	0.9	0.6-1.3	6.7	1.1	0.9-1.3	4.6	0.5	0.2-1.2
Pay grade												
E-1 to E-4	<b>4.7</b>	<b>1.4</b>	<b>1.2-1.5</b>	<b>13.9</b>	<b>3.4</b>	<b>1.9-6.0</b>	<b>7.2</b>	<b>1.4</b>	<b>1.2-1.7</b>	9.4	1.6	0.8-3.4
E-5 to E-6	3.2	1.1	1.0-1.2	<b>7.9</b>	<b>2.0</b>	<b>1.1-3.6</b>	4.3	0.9	0.7-1.1	3.9	0.8	0.3-1.9
E-7 to E-9	2.4	0.9	0.8-1.1	2.2	0.5	0.2-1.5	<b>2.8</b>	<b>0.6</b>	<b>0.4-0.9</b>	4.7	0.8	0.2-4.2
O-1 to O-3 <sup>e</sup>	<b>2.2</b>	<b>0.8</b>	<b>0.7-1.0</b>	3.9	0.7	0.3-1.9	4.3	0.9	0.7-1.2	3.4	1.0	0.3-3.0
O-4 or higher	2.0	0.9	0.7-1.1	2.6	0.4	0.1-1.5	6.0	1.3	1.0-1.9	—	—	—
Occupation												
Pilot	<b>1.3</b>	<b>0.6</b>	<b>0.4-0.9</b>	7.4	2.3	0.5-10.9	1.8	0.4	0.1-3.5	—	—	—
Logistics	3.9	1.2	1.0-1.4	12.0	0.9	0.5-1.7	6.0	1.2	0.8-1.7	9.7	1.3	0.7-2.6
Support	3.3	1.1	0.9-1.3	<b>5.6</b>	<b>0.5</b>	<b>0.2-0.9</b>	5.5	1.2	0.9-1.6	8.3	1.1	0.5-2.2
Other Operations	2.7	0.9	0.7-1.1	8.9	0.8	0.4-1.7	6.5	1.3	0.9-1.8	7.8	1.3	0.6-2.9
Medical	<b>4.4</b>	<b>1.6</b>	<b>1.3-2.0</b>	10.9	1.2	0.6-2.5	5.1	1.1	0.8-1.5	—	—	—
Acquisition	3.0	1.2	0.9-1.6	9.4	1.1	0.4-3.0	4.4	0.9	0.5-1.7	—	—	—
Professional	1.8	0.7	0.4-1.6	11.1	3.5	0.3-40.0	7.8	1.8	0.9-2.6	14.9	2.3	0.6-8.9
Other <sup>f</sup>	2.6	1.0	0.8-1.3	2.1	0.3	0.1-1.2	2.5	0.6	0.3-1.1	<b>1.5</b>	<b>0.2</b>	<b>0.1-0.8</b>

*Note.* OR = Odds ratio. CI = 95% confidence interval. Bold font indicates an OR that is significant at  $p < .05$  (CI does not include 1.0). ORs and associated CIs are adjusted for race, marital status, religious faith, pay grade, and occupational category. Unadjusted ORs are available from the authors. Dashes indicate analyses that could not be conducted due to low *ns*.

<sup>a</sup> Weighted for sampling differences in base population as well as all demographic variables depicted.

<sup>b</sup> Computed using only those participants who reported problematic levels of suicidal ideation.

<sup>c</sup> Non-Hispanic White.

<sup>d</sup> Included those of “unknown” race for analyses of women’s data.

<sup>e</sup> Included all officers for analyses of women’s data.

<sup>f</sup> Included pilots as well as medical and acquisitions personnel for analyses of women’s data.

Table 11

*Bivariate Odds Ratios and 95% Confidence Intervals for Potential Risk/Protective Factors Predicting Suicidal Ideation*

Variable	Men			Women		
	<i>M (SD)</i>	<i>OR</i>	<i>95% CI</i>	<i>M (SD)</i>	<i>OR</i>	<i>95% CI</i>
<b>Individual Variables</b>						
Alcohol problems	4.34 (4.82)	<b>1.44</b>	<b>1.32–1.57</b>	2.88 (3.25)	<b>1.30</b>	<b>1.10–1.53</b>
Years in military	11.05 (7.36)	<b>0.86</b>	<b>0.79–0.94</b>	8.19 (6.17)	<b>0.73</b>	<b>0.61–0.87</b>
Financial stress	1.87 (0.94)	<b>1.65</b>	<b>1.53–1.79</b>	1.78 (0.90)	<b>1.51</b>	<b>1.32–1.73</b>
Depressive symptoms	1.76 (0.80)	<b>2.75</b>	<b>2.46–3.07</b>	1.77 (0.73)	<b>2.42</b>	<b>1.95–3.01</b>
Personal coping	4.05 (0.58)	<b>0.42</b>	<b>0.38–0.47</b>	3.97 (0.54)	<b>0.61</b>	<b>0.52–0.72</b>
Physical well being	4.01 (0.75)	<b>0.46</b>	<b>0.42–0.51</b>	3.98 (0.76)	<b>0.62</b>	<b>0.54–0.72</b>
Religious involvement	3.04 (1.07)	<b>0.72</b>	<b>0.66–0.79</b>	3.12 (1.01)	0.93	0.80–1.07
<b>Family Variables</b>						
Number of children	0.97 (1.14)	<b>0.75</b>	<b>0.67–0.83</b>	0.77 (1.00)	0.88	0.72–1.06
Family income (monthly \$)	5974 (3250)	<b>0.79</b>	<b>0.71–0.88</b>	6752 (4353)	0.86	0.73–1.01
Relationship satisfaction <sup>a</sup>	5.65 (1.25)	<b>0.55</b>	<b>0.50–0.61</b>	5.79 (1.23)	<b>0.71</b>	<b>0.61–0.83</b>
Career support from partner <sup>a</sup>	4.83 (1.07)	<b>0.70</b>	<b>0.64–0.76</b>	5.23 (0.91)	0.85	0.71–1.00
Partner aggression perpetration <sup>a</sup>	0.29 (1.86)	<b>1.33</b>	<b>1.23–1.43</b>	0.44 (2.18)	<b>1.28</b>	<b>1.16–1.41</b>
Partner aggression victimization <sup>a</sup>	0.85 (3.75)	<b>1.38</b>	<b>1.28–1.48</b>	0.51 (2.77)	<b>1.42</b>	<b>1.24–1.63</b>
Family coping <sup>b</sup>	4.87 (1.07)	<b>0.65</b>	<b>0.59–0.72</b>	5.19 (0.92)	<b>0.68</b>	<b>0.58–0.80</b>
Length of marriage <sup>c</sup>	9.21 (6.94)	0.93	0.83–1.05	5.80 (5.49)	0.83	0.63–1.10
Spouse preparedness for deployment <sup>c</sup>	3.10 (0.84)	<b>0.68</b>	<b>0.60–0.76</b>	3.14 (0.89)	<b>0.78</b>	<b>0.63–0.97</b>
Parent–child relationship satisfaction <sup>d</sup>	5.05 (0.80)	<b>0.64</b>	<b>0.56–0.74</b>	5.18 (0.74)	<b>0.69</b>	<b>0.56–0.86</b>
Parent–child aggression <sup>d</sup>	1.11 (1.36)	1.12	0.97–1.28	1.42 (1.53)	1.23	0.96–1.58
<b>Organization Variables</b>						
Satisfaction with the Air Force	3.99 (1.18)	<b>0.48</b>	<b>0.43–0.53</b>	4.19 (1.18)	<b>0.59</b>	<b>0.51–0.68</b>
Support from leadership	4.03 (0.93)	<b>0.56</b>	<b>0.52–0.62</b>	3.99 (0.90)	<b>0.68</b>	<b>0.59–0.78</b>
Workgroup cohesion	4.03 (1.13)	<b>0.54</b>	<b>0.48–0.61</b>	3.81 (1.16)	<b>0.74</b>	<b>0.64–0.85</b>
Workplace relationship satisfaction	3.83 (0.92)	<b>0.58</b>	<b>0.53–0.64</b>	3.72 (0.91)	<b>0.74</b>	<b>0.64–0.84</b>
Weeks deployed in previous year	8.29 (11.48)	0.93	0.85–1.02	5.17 (9.31)	1.08	0.91–1.27
Weekly hours worked	41.12 (4.75)	<b>1.18</b>	<b>1.10–1.27</b>	40.68 (3.25)	1.13	0.97–1.32
<b>Community Variables</b>						
Community unity	4.01 (0.89)	<b>0.54</b>	<b>0.49–0.59</b>	4.06 (0.84)	<b>0.67</b>	<b>0.58–0.77</b>
Support from neighbors	4.43 (1.06)	<b>0.64</b>	<b>0.59–0.70</b>	4.33 (1.06)	<b>0.86</b>	<b>0.75–0.99</b>
Support for youth	4.21 (1.04)	<b>0.66</b>	<b>0.61–0.73</b>	4.30 (1.02)	<b>0.82</b>	<b>0.71–0.94</b>
Support from formal agencies	4.30 (1.00)	<b>0.63</b>	<b>0.57–0.69</b>	4.44 (0.94)	<b>0.79</b>	<b>0.67–0.93</b>
Social support	4.13 (1.40)	<b>0.61</b>	<b>0.56–0.67</b>	4.15 (1.44)	<b>0.79</b>	<b>0.67–0.92</b>
Community safety	5.00 (0.84)	<b>0.71</b>	<b>0.66–0.77</b>	5.00 (0.75)	<b>0.78</b>	<b>0.68–0.89</b>
Community stressors	4.03 (0.95)	<b>1.75</b>	<b>1.59–1.93</b>	4.02 (0.93)	<b>1.32</b>	<b>1.13–1.53</b>

*Note.* Computed using development subsamples only. **Bold text** indicates a significant odds ratio ( $p < .05$ ). All aggression variables refer to physical aggression. Weighted  $n = 2,963$  men and 1,173 women unless otherwise indicated.

<sup>a</sup> $n = 2,238$  men and 833 women. <sup>b</sup> $n = 1,816$  men and 680 women. <sup>c</sup> $n = 1,721$  men and 509 women. <sup>d</sup> $n = 1,314$  men and 464 women.



Table 12

*Final Multivariate Regression Models Predicting Suicidal Ideation*

Variable	Men		Women	
	<i>OR</i>	<i>95% CI</i>	<i>OR</i>	<i>95% CI</i>
Individual Level				
Depressive symptoms	2.01	1.81–2.23	2.21	1.88–2.59
Personal coping	0.64	0.58–0.71	–	–
Physical well being	0.84	0.76–0.92	–	–
Financial stress	1.15	1.06–1.25	1.31	1.15–1.48
Family Level				
Family income (monthly \$)	0.78	0.71–0.85	–	–
Number of children	0.86	0.79–0.94	–	–
Organization Level				
Satisfaction with the Air Force	0.65	0.58–0.73	0.72	0.63–0.83
Workplace relationship satisfaction	0.74	0.68–0.81	0.86	0.76–0.97
Support from leadership	0.77	0.70–0.85	0.76	0.66–0.87
Weekly hours worked	1.16	1.08–0.24	–	–
Community Level				
Community unity	0.69	0.62–0.77	0.65	0.58–0.73
Social support	0.78	0.72–0.85	–	–
Community stressors	1.18	1.06–0.32	–	–
Community safety	0.88	0.81–0.96	–	–
Overall				
Depressive symptoms	2.06	1.87–2.27	2.12	1.80–2.50
Personal coping	0.66	0.60–0.74	–	–
Financial stress	–	–	1.26	1.11–1.43
Satisfaction with the Air Force	0.79	0.69–0.90	0.80	0.68–0.93
Community unity	0.83	0.75–0.93	–	–
Social support	0.86	0.78–0.94	–	–
Weekly hours worked	1.14	1.05–1.23	–	–

Table 13

*Final Multivariate Regression Models Predicting Suicidal Ideation in the Family-Structure-Specific Subsamples*

Variable	Men			Women		
	<i>n</i>	<i>OR</i>	<i>95% CI</i>	<i>n</i>	<i>OR</i>	<i>95% CI</i>
Family Level (in relationships)	4350			1657		
Relationship satisfaction		0.64	0.59–0.70		0.76	0.66–0.89
Partner aggression perpetration		1.22	1.15–1.30		–	–
Partner aggression victimization		–	–		1.21	1.07–1.38
Number of children		0.83	0.75–0.93		–	–
Career support from partner		0.84	0.77–0.92		–	–
Family Level (married)	3415			N/A		
Relationship satisfaction		0.59	0.54–0.65			
Spouse preparedness for deployment		0.74	0.65–0.83			
Partner aggression perpetration		1.24	1.15–1.33			
Number of children		0.86	0.76–0.96			
Family Level (parents)	2591			930		
Parent-child relationship satisfaction		0.66	0.57–0.76		0.73	0.59–0.89
Family coping		0.77	0.69–0.85		0.64	0.53–0.78
Number of children		0.81	0.68–0.95		–	–
Family Level (parents in relationships)	2485			717		
Relationship satisfaction		0.64	0.57–0.72		0.66	0.54–0.82
Parent-child relationship satisfaction		0.69	0.60–0.79		0.72	0.57–0.90
Number of children		0.83	0.70–1.00		–	–
Partner aggression victimization		1.16	1.06–1.27		–	–
Overall (in relationships)	4350			N/A		
Depressive symptoms		2.02	1.78–2.30			
Personal coping		0.70	0.62–0.79			
Relationship satisfaction		0.76	0.68–0.84			
Community unity		0.80	0.70–0.90			
Satisfaction with the Air Force		0.81	0.69–0.95			
Partner aggression perpetration		1.21	1.13–1.31			
Social support		0.86	0.77–0.96			
Career support from partner		1.12	1.00–1.25			

*Note.* N/A = Not Applicable; these models did not retain any family-structure-specific variables when run using women's data.

<sup>a</sup> All *ns* indicate weighted participant counts.